Application No. Not Yet Assigned First Preliminary Amendment

Docket No.: 13156-00015-US

JC17 Rec'd PCT/PTO 2 6 AUG 2005 AMENDMENTS TO THE CLAIMS

1. (Original) A process for preparing high-concentration gaseous formaldehyde having a molar $CH_2O: H_2O$ ratio of ≥ 0.6 from an aqueous formaldehyde solution by evaporation of at least part of the solution, in which the aqueous formaldehyde solution is heated to a evaporation temperature T and the gas phase formed is taken off, wherein the evaporation temperature T obeys the relationship:

$$T [^{\circ}C] \ge T' \min [^{\circ}C]$$

and

$$A = +68.759$$
, $B = +124.77$, $C = -12.851$, $D = -10.095$,

where c is the instantaneous CH₂O content of the aqueous formaldehyde solution during the evaporation in percent by weight and is from 20 to 99% by weight.

- 2. (Original) A process as claimed in claim 1, wherein the aqueous formaldehyde solution used as starting material in the process has CH₂O content of from 50 to 99% by weight.
- 3. (Original) A process as claimed in claim 2, wherein the aqueous formaldehyde solution has CH₂O content of from 70 to 90% by weight.
- 4. (Currently amended) A process as claimed in any of claims 1 to 3 claim 1, wherein the pressure during the evaporation is from 0.1 to 50 bar.
- 5. (Currently amended) A process as claimed in any of claims 1 to 4 claim 1, wherein the molar $CH_2O: H_2O$ ratio is ≥ 1.4 .
- 6. (Currently amended) A process as claimed in any of claims 1 to 5 claim 1, wherein a temperature which obeys the relationship

$$T [^{\circ}C] \ge T$$
" min $[^{\circ}C]$

where
$$T^2 \min(c) = A' + B' \times (c/100) + C' \times (c/100)^2 + D' \times (c/100)^3$$

and

$$A' = +6.0156$$
, $B' = +52.918$, $C' = +49.699$, $D' = +34.286$,

where c is the instantaneous CH₂O content of the aqueous formaldehyde solution during the evaporation in percent by weight and is from 20 to 99% by weight, is maintained in the aqueous formaldehyde solution at every point in the evaporator.

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- 7. (Currently amended) A process as claimed in any of claims 1 to 6 claim 1, wherein the evaporation is carried out in a stirred vessel, a helical tube, a film evaporator or another apparatus having heat exchanger characteristics.
- 8. (Currently amended) A process as claimed in any of claims 1 to 7 claim 1, wherein the aqueous formaldehyde solution used as starting material in the process is prepared by oxidative dehydrogenation of methanol.
- 9. (Canceled)